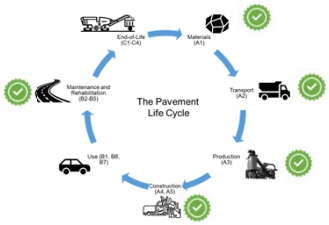
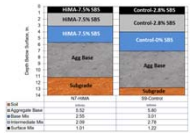
Cradle-to-Grave LCA

- Functional Unit: One lane-mile
  - 12 ft wide





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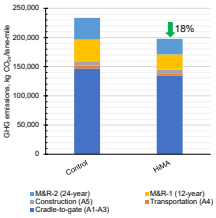
Cradle-to-Grave Results

Functional Unit: One lane-mile

- From Cradle-to-Grave perspective HiMA section had 18% lower GHG emissions



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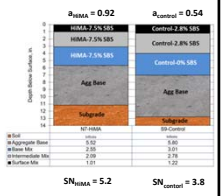
Future M&R Scheduling

- The structural layer coefficients for HiMA mixtures are 0.92
  - Compared to 0.54 (ALDOT) for conventional asphalt mixtures.



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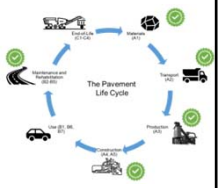
Summary

- Cradle-to-Gate LCA results
  - HiMA mixture had higher GHG emissions compared to control
- Cradle-to-Constructed LCA results
  - HiMA mixture showed 9% lower GHG emissions compared to control
- Cradle-to-Grave LCA results
  - HiMA mixture showed 18% lower GHG emissions compared to control
- For specialty mixtures it is important to consider life-extension benefits into LCA



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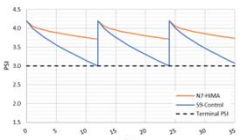
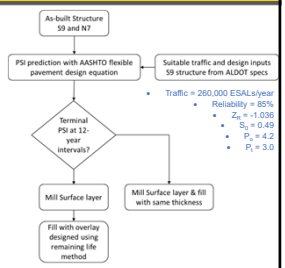
Future M&R Scheduling



Year	Activity	
	Control	HiMA
0	Initial construction	Initial construction
12	1.2" mill and 1.6" fill	1.0" mill and 1.0" fill
24	1.6" mill and 2.0" fill	1.0" mill and 1.0" fill
35	end-of-analysis period	end-of-analysis period



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Thank You

Questions?

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